

# Computing Infrastructure – Minos 2009/06

- MySQL and CVS upgrades
- Hardware deployment
- Condor / Grid status
- /minos/data file server
- Parrot status
- Minverva / NOVA

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## MYSQL

- minos-db1 runs mysql 5.0.67 on minos-mysql2
  - minos-db1 network alias moved March 17
  - CRL server is independent, on its own port
  - Support by DBA group (minosdb-support)
- Farm replica moved to minos-mysql1 from fnpcsrv1  
May 12, last scripts gone on May 26
- Analysis replicas are standing by , thanks to rearmstr
  - Not used yet, new server has good capacity

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## CVS upgrades

- Old CVS server on minos01 is now disabled
  - We had accidentally left the pserver running, causing confusion for one user

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## Hardware deployment

- /minos/data2 – 44 TB Hitachi disk added
  - We had borrowed or stolen about 8 TB
  - Initially, saw only 12 TB free, corrected in late May.
  - 36 TB free today
  - Users and analysis files remain on full Nexsan disk
- Plan to move analysis to HDC disk
  - 7 TB used now, need more space
- Bluearc maintenance all day Monday June 22
  - Installing new servers, no immediate change

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## Hardware deployment

- Will shift the 30 TB Satabeast from Bluearc to Dcache after buying equivalent replacement HDS disk
- Servers -
  - minos27 – will replace minos01
    - please test
    - missing some compat libraries, will add
  - Minos-sam04 – available, not in use yet
  - Planning replacements for minos02-24 now

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## Condor/Grid status

- Ryan Patterson managing condor
- access from all Cluster nodes
- running on any Femigrid node
- minos\_q summary
- Wrapper for condor\_rm, condor\_hold
  - To prevent SAZ authentication overload
  - Condor 7.3 upgrade will fix this internally

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## Condor/Grid status

- Scaling to 5K jobs
  - minos25 can probably handle this
  - need upgrade to Condor 7.3x , to prevent authentication floods
  - understand and prevent Bluearc overloads

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## /minos NFS fileserver

- Performance issues being investigated
  - 20 parallel reads can cause global slowdowns
  - Minos rates slow from 30MB/s to under 1
  - Bluearc latency increases from 5, to over 200 Ms
  - Happens 18:00 to 24:00 Tue/Thu/Sat/Sun
- LOCKING - /grid/fermiapp/minos/scripts/cp1
  - uses a single lock file, keep history
  - improving to allow more than one stream



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## /minos NFS fileserver

- Major hardware upgrade June 21 00:00 to 23:59
  - no effect on performance expected
- Trying /minos/home logins for mindata, minospro et al

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## PARROT deployment on Fermigrid

- PARROT has problems with SAM projects
  - I have not tracked this down, sorry.

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## GRID

- Monte Carlo capacity has greatly increased
  - Importing data as before, mcimport on minos26
- TACC (U.T. Austin) Teragrid facility – Rashid Mehdiyev
  - facility had over 60K cores
    - local database replica, and squid for Parrot
    - tested MC generatation
  - setting up full ND processing
  - subtle problems with parrot, using local release

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## Minerva / NOVA

- Will share the Oracle server
  - Load is presently a few percent
  - Upgrading the hardware next year
- Nucomp monthly coordination meeting - Lee Lueking
  - includes Mu2e
- IF login cluster
  - Similar to Minos Cluster, but shared